



Central Valley Regional Water Quality Control Board

12 June 2025

Denise England, Grant Manager
Tulare County Resource
Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

Certified Mail
7020 2450 0000 6785 9083

NOTICE OF APPLICABILITY, STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS TULARE COUNTY RESOURCE MANAGEMENT AGENCY, DELFT COLONY WASTEWATER TREATMENT FACILITY, TULARE COUNTY

On 30 September 2024, Provost & Pritchard Consulting Group submitted a Report of Waste Discharge (RWD) on behalf of Tulare County Resource Management Agency (Discharger), seeking coverage under State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order) for the Delft Colony Wastewater Treatment Facility (WWTF). The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order 88-097.

Based on the information provided, the system treats and disposes less than 100,000 gallons per day (gpd) of domestic wastewater and is therefore eligible for coverage under the general and specific conditions of the General Order. This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below. You are hereby assigned enrollee number **2014-0153-DWQ-R5427** for your system. Please note that coverage under the General Order will become effective after WDRs Order 88-097 has been rescinded (tentatively scheduled for either the August or October 2025 Board Meeting).

You should familiarize yourself with the General Order and its attachments enclosed with this letter, which describe mandatory discharge and monitoring and reporting requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment systems sections of the General Order and the attached **Monitoring and Reporting Program (MRP) No. 2014-0153-DWQ-R5427**. The MRP was developed

NICHOLAS AVDIS, CHAIR | PATRICK PULUPA, EXECUTIVE OFFICER

1685 E Street, Fresno, CA 93706 | www.waterboards.ca.gov/centralvalley

after consideration of your waste characterization and site conditions described in the attached memorandum.

DESCRIPTION OF DISCHARGE

The WWTF is located in Tulare County, approximately four miles southwest of Dinuba, CA, and serves the community of Delft Colony. The WWTF receives domestic wastewater from approximately 113 residential connections and features a dual bentonite lined facultative lagoon system with two disposal ponds operated in parallel. The coordinates for the pond system at the WWTF are latitude 36.508°, longitude -119.448°. The RWD indicates wastewater enters the WWTF through a gravity sewer main to the influent lift station. Wastewater is pumped from the lift station consisting of a primary and standby pump, to the headworks through a 6-inch force main. Influent flow is measured by a magnetic flowmeter at the entrance to the headworks which includes a bar screen and grinder. The screened effluent is discharged through a splitter box into one of the two facultative lagoons which contain an aerator. The facultative lagoons typically operate in parallel, but the splitter box design enables them to operate in series as needed. The lagoons discharge to a splitter box enabling the return of treated effluent to the lagoons, recirculation via the lift station, or discharge to the disposal ponds. The treated effluent is discharged into one of two disposal ponds for percolation or evaporation. Typically, only one disposal pond is in use while the other serves as a standby disposal pond.

The previously permitted 30-day average daily dry weather flow for the WWTF (specified in WDRs Order 88-097) is 572,000 gallons per day (gpd); however, the RWD indicates that the limit of 572,000 gpd was made in error as the WWTF has a design capacity of only 57,200 gpd.

FACILITY SPECIFIC REQUIREMENTS

The Discharger shall maintain exclusive control over the discharge and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ, with all attachments and MRP No. 2014-0153-R5427.

In accordance with Section B.1.a of the General Order, influent flow shall not exceed a **monthly average daily discharge of 57,200 gpd.**

The General Order states in Section B.1.I that the Discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater system equipment, activities, land application areas (spray field), and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the applicable setback requirements, as summarized in the following table:

Table 1 – Setback Requirements

Equipment or Activity	Domestic Well	Ephemeral Stream Drainage	Property Line
Impoundment (Undisinfected secondary wastewater) (see 1 below)	150 ft	150 ft (see 2 below)	50 ft

1. Undisinfected secondary recycled water is defined in California Code of Regulations, title 22, section 60301.900.
2. Setback established by California Code of Regulations, title 22, section 60310(d).

The Discharger shall comply with all applicable sections of the General Order, including:

1. Section B.1 – All Wastewater Systems
2. Section B.5 - Pond Systems
3. Section B.8 - Sludge/Solids/Biosolids Disposal
4. Section C - Groundwater and Surface Water Limitations

Provision E.1 of the General Order requires dischargers enrolled under the General Order to prepare and implement the following reports within **90 days** of the issuance of the NOA.

- Spill Prevention and Emergency Response Plan (Provision E.1.a)
- Sampling Analysis Plan (Provision E.1.b)
- Sludge Management Plan (Provision E.1.c)

A copy of the Spill Prevention and Emergency Response Plan and the Sampling and Analysis Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board staff upon request. The Sludge Management Plan shall be submitted to the Central Valley Water Board **by 10 September 2025**.

As stated in Section E.2.w., in the event any change in control or ownership of the Facility or wastewater disposal areas, the Discharger must notify the succeeding owner or operator of the existence of this General Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board Executive Officer.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ, with all attachments, and MRP No. 2014-0153-DWQ-R5427 could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste

disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley as part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative. Further details of these strategies are discussed in the enclosed memorandum. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this NOA to ensure the goals of the Salt and Nitrate Control Programs are met.

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15
Place ID: 219515
Facility Name: Delft Colony WWTF
Order: 2014-0153-DWQ-R5427

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or Omar.Mostafa@waterboards.ca.gov. Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the Small Domestic General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Virat Kang. Virat Kang can be reached at (559) 488-4345 or by email at Virat.Kang@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next

business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at [Copies of the laws and regulations applicable to filing petitions](https://www.waterboards.ca.gov/public_notices/petitions/water_quality) (https://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

In order to conserve paper and reduce mailing costs, a paper copy of General Order WQO 2014-0153-DWQ has been sent only to the Discharger. Others are advised that the [General Order](#) is available on the State Water Board's website (http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf).

Please note that WDRs Order 88-097 is proposed to be rescinded at either the August or October 2025 meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your facility under the General Order shall become applicable subject to this Notice of Applicability. If you have any questions regarding this matter, please contact Virat Kang by phone at (559) 488-4345, or by email at Virat.Kang@waterboards.ca.gov.

Digitally signed by Alex S. Mushegan
For Patrick Pulupa
Executive Officer

(see next page for Attachments, Enclosures, and cc's)

Attachments:

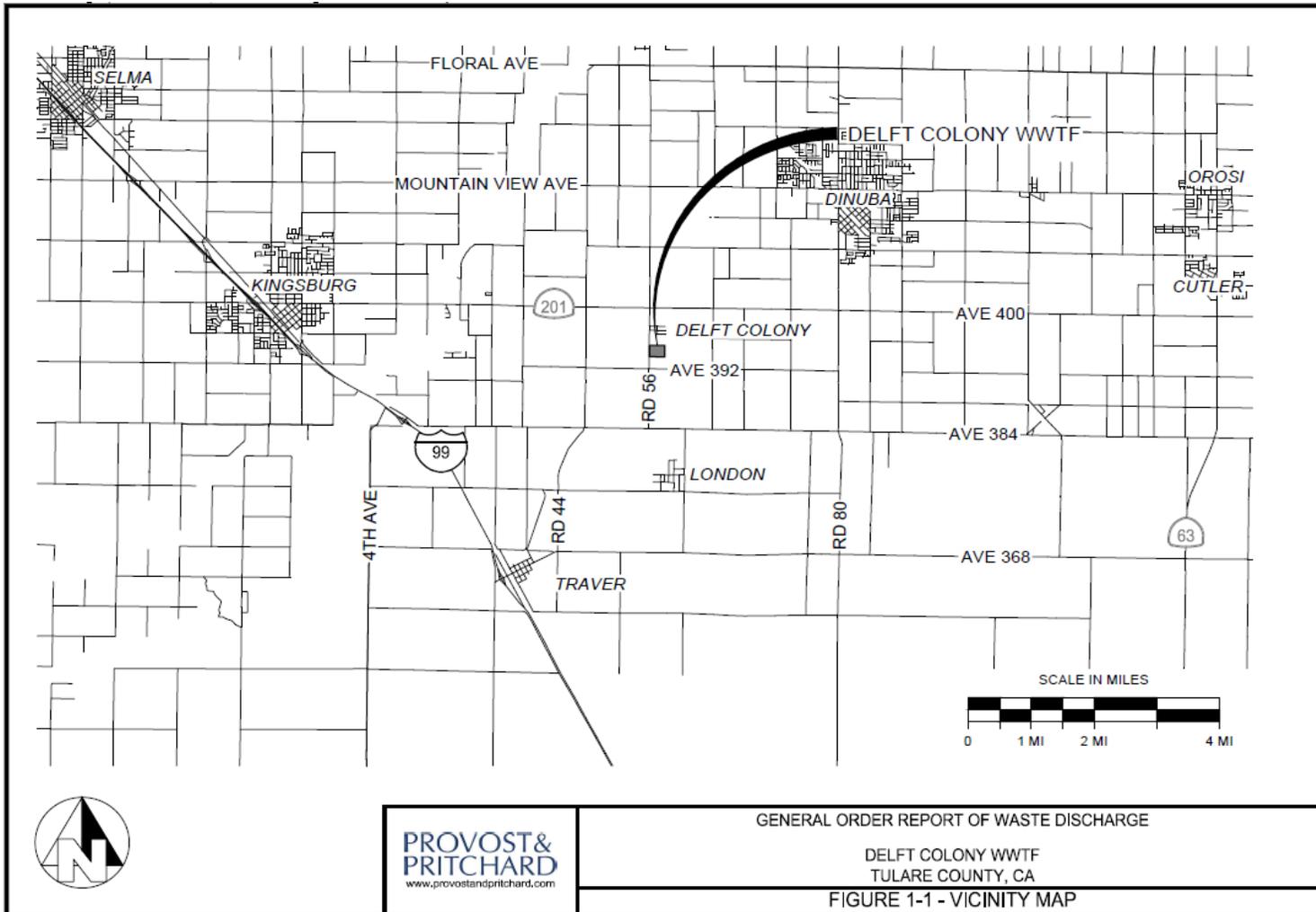
- Attachment A – Vicinity Map
- Attachment B – Site Map
- Attachment C – Process Flow Diagram

Enclosures:

- Monitoring and Reporting Program 2014-0153-DWQ-R5427
- Staff Review Memorandum for Tulare County Resource Management Agency
Delft Colony WWTF
- State Water Resources Control Board Order WQ 2014-0153-DWQ
(Discharger only)

cc:

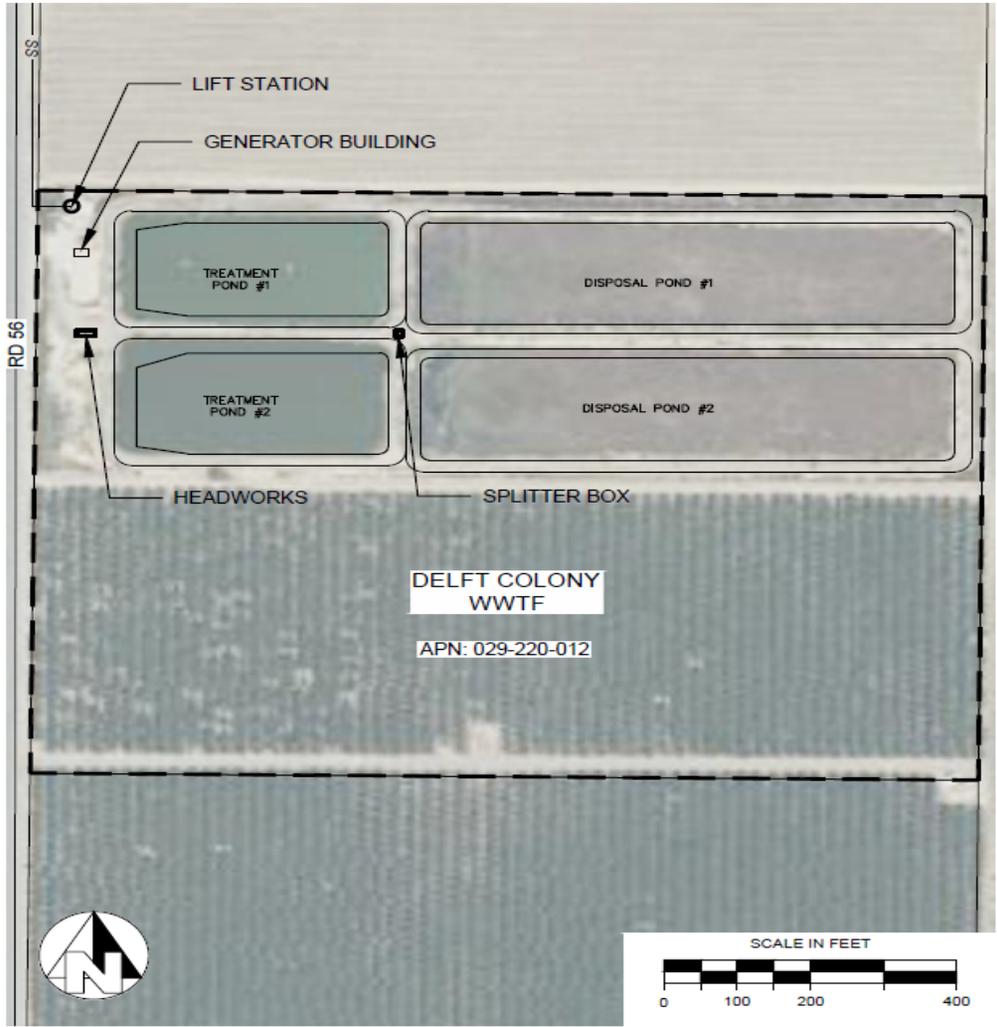
- Adam Forbes, State Water Resources Control Board, DDW (via email)
- Christopher Moskal, State Water Resources Control Board, OCC (via email)
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- RB5S-cvsalts@waterboards.ca.gov
- Denise England, Tulare County RMA, Tulare (via email)
- Maija Madec, Provost and Pritchard Consulting Group, Clovis (via email)
- Jason Sherrell, Central Cal Waterworks Inc., Fresno (via email)
- Debbie Webster, Central Valley Clean Water Association (via email)



ATTACHMENT A – VICINITY MAP

Notice of Applicability 2014-0153-DWQ-R5427

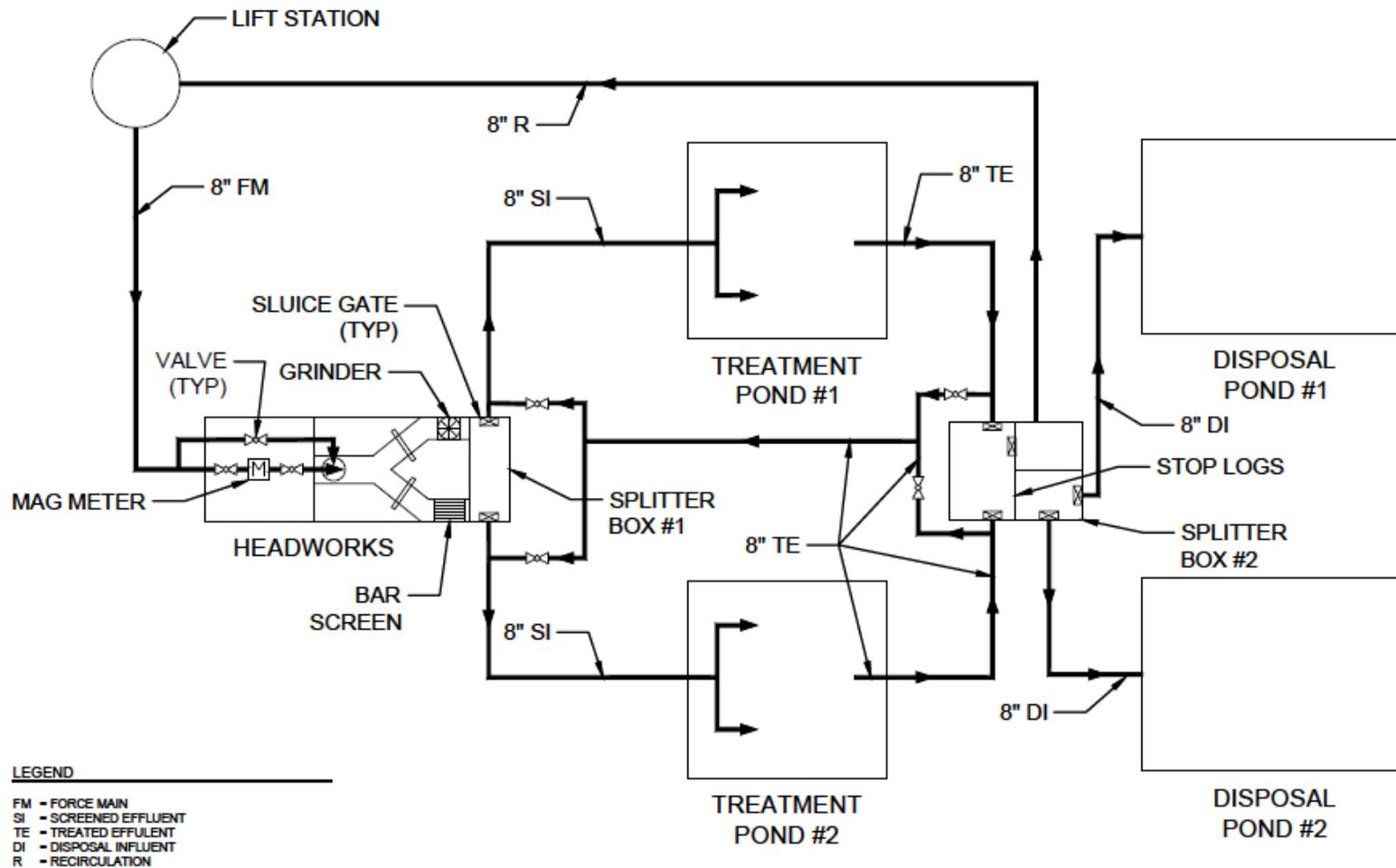
Source: September 2024 RWD



ATTACHMENT B – SITE MAP

Notice of Applicability 2014-0153-DWQ-R5427

Source: September 2024 RWD



ATTACHMENT C – PROCESS FLOW DIAGRAM

Notice of Applicability 2014-0153-DWQ-R5427

Source: September 2024 RWD

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

**MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5427
FOR
TULARE COUNTY RESOURCE MANAGEMENT AGENCY
DELFT COLONY WASTEWATER TREATMENT FACILITY
TULARE COUNTY**

This Monitoring and Reporting Program (MRP) describes requirements for the Tulare County Resource Management Agency Delft Colony Wastewater Treatment Facility (WWTF). This MRP is issued pursuant to Water Code section 13267. Tulare County Resource Management Agency (Discharger) shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Section 13267 of the California Water Code states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.”

Section 13268 of the California Water Code states, in part:

“(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

The Discharger owns and operates the WWTF that is subject to Notice of Applicability (NOA) 2014-0153-DWQ-R5427. The NOA enrolls the WWTF under State Water Resources Control Board Order WQ 2014-0153-DWQ, *General Waste Discharge*

Requirements for Small Domestic Wastewater Treatment Systems (General Order) upon the rescission of the Waste Discharge Requirements (WDRs) Order 88-097. The reports required in this MRP are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program (ELAP) certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

POND SYSTEM MONITORING

A. Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater prior to any treatment or return flows. At a minimum, influent monitoring shall include the monitoring specified in Table 1 below.

Table 1 – Influent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow	gpd	Meter	Continuous (see 1 and 2 below)	Quarterly

1. For continuous analyzers, the Discharger shall document routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation.
2. At a minimum, the total flow shall be measured weekly to calculate the average daily flow.

B. Wastewater Pond Monitoring

All wastewater and treated wastewater storage ponds shall be monitored as specified in Table 3 below.

Table 2 – Wastewater Pond Monitoring

Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Dissolved Oxygen (DO) (see 1 below)	mg/L	Grab	Monthly	Quarterly
Biochemical Oxygen Demand (BOD)	mg/L	Grab	Monthly	Quarterly
Electrical Conductivity (EC)	µmhos/cm	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
Freeboard	0.1 feet	Measurement	Monthly	Quarterly
Odors	--	Observation	Monthly	Quarterly
Berm condition	--	Observation	Monthly	Quarterly

- DO shall be measured between 8:00 am and 10:00 am and shall be taken opposite the pond inlet at a depth of approximately one foot, when there is sufficient water in the pond(s). If there is insufficient water in the pond(s) no sample shall be collected and the reason provided in the quarterly monitoring report. Should the DO be below 1.0 mg/L during a monthly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.

SLUDGE/BIOSOLIDS MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernable. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to:

centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706.

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15
Place ID: 219515
Facility Name: Delft Colony WWTF
Order: 2014-0153-DWQ-R5427

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g., the January-March Quarterly Report is due by May 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At the minimum, the quarterly reports shall include:

1. Results of all required monitoring.
2. A comparison of monitoring data to the requirements (including the flow limitation), disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. Data shall be presented in tabular format.
3. Copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment system, including discussion of the capacity issues, nuisance conditions, system problems and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted, as appropriate.
3. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.

4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
5. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

C. State Water Board Volumetric Annual Reporting

Per [State Water Resources Control Board's Water Quality Control Policy](https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/) (https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/), amended in December 2018, dischargers of treated wastewater and recycled water are required to report annually monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. The Discharger shall submit an annual report to the State Water Board by **April 30 of each calendar year** furnished with the information detailed below. The Discharger must submit this annual report containing monthly data in electronic format via the State Water Board's Internet [GeoTracker](https://geotracker.waterboards.ca.gov/) system (<https://geotracker.waterboards.ca.gov/>). Required data shall be submitted to the GeoTracker database under a site-specific global identification number. Any data will be made publicly accessible as machine readable datasets. The Discharger must report all applicable items listed below:

1. **Influent.** Monthly volume of wastewater collected and treated by the wastewater treatment plant.
2. **Production.** Monthly volume of wastewater treated, specifying level of treatment.
3. **Discharge.** Monthly volume of treated wastewater discharged to land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture of fields with harvested grounds.
4. **Reuse.** Monthly volume of recycled water distributed.
5. **Reuse Categories.** Annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22 in each of the use categories listed below:
 - a. Agricultural irrigation: pasture or crop irrigation.
 - b. Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
 - c. Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.

- d. Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
- e. Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
- f. Geothermal energy production: augmentation of geothermal fields.
- g. Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.
- h. Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use.
- i. Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in section 116275 of the Health and Safety Code, or into a constructed system conveying water to such a reservoir (Water Code § 13561).
- j. Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system as defined in section 116275 of the Health and Safety Code (Water Code § 13561).
- k. Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program on the first day of the month following rescission of WDRs Order 88-097.

Ordered by:

Digitally signed by Alex S. Mushegan

For PATRICK PULUPA, Executive Officer

12 June 2025

(Date)

GLOSSARY

BOD	Biochemical oxygen demand
DO	Dissolved oxygen
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
Monthly	Once per calendar month.
Quarterly	Once per calendar quarter.
Annually	Once per year.
mg/L	Milligrams per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
ND	Not Detected

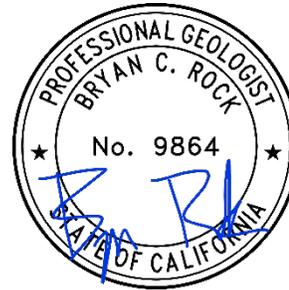
Central Valley Regional Water Quality Control Board

TO: Alexander S. Mushegan
Supervising Water Resource Control Engineer

FROM: Bryan C. Rock
Senior Engineering Geologist
PG 9864

Virat Kang
Water Resource Control Engineer

DATE: 12 June 2025



APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER DISCHARGE SYSTEMS; TULARE COUNTY RESOURCE MANAGEMENT AGENCY; DELFT COLONY WASTEWATER TREATMENT FACILITY; TULARE COUNTY

On 30 September 2024, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) requesting coverage under State Water Resources Control Board's WQ Order 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order) for the Delft Colony Wastewater Treatment Facility (Facility or WWTF). The Facility is owned and operated by Tulare County Resource Management Agency (Discharger). The RWD was stamped by Maija Madec (RCE 79709) with Provost and Pritchard and includes a Nitrogen Limit Evaluation.

BACKGROUND INFORMATION

The Facility is located in Tulare County (36.508°, -119.448°) approximately four miles southwest of Dinuba (as shown in Attachment A of the Notice of Applicability [NOA]) and treats domestic wastewater from the unincorporated community of Delft Colony. The Facility is currently permitted under Waste Discharge Requirements (WDRs) Order 88-097, which specified the following requirements:

- 30-day average flow limit of 572,000 gallons per day (gpd); however, the RWD indicates that the permitted flow value specified by WDRs Order 88-097 includes a typographical error as the design capacity of the facility is only 57,200 gpd.

- The dissolved oxygen (DO) level of the uppermost one-foot of wastewater in lagoons or holding ponds shall be greater than 1.0 mg/L.
- Maximum electrical conductivity (EC) level of the discharge shall not exceed the weighted average of the source water plus 500 micromhos/cm. According to 2022 and 2024 Consumer Confidence Report data presented in the RWD, average source water salinity is approximately 310 to 340 micromhos/cm.

DESCRIPTION OF DISCHARGE

The WWTF features a headworks, dual facultative lagoon system operated in parallel, and two disposal ponds. Screened effluent from the headworks (influent flow meter, bar screen, and grinder) is discharged to one of two parallel facultative lagoons. The lagoons are bentonite-lined, each contain a 5-horsepower aerator and have a total depth of 7.5 feet, including two feet of freeboard. The surface area at 5.5 feet depth is 2.3 acres. The RWD indicates each lagoon holds a volume of 1.8 million gallons (MG); however, based on the provided dimensions and an operating depth of 5.5 feet, each lagoon holds a volume of 2.06 MG. Treated effluent from the lagoons discharges to a splitter box enabling the return of treated effluent to the lagoons, recirculation via the lift station, or discharge to one of two disposal ponds. Each disposal pond has a total bottom area of approximately 3.25 acres, and each pond is approximately 4.9 feet deep, including two feet of freeboard. The resulting volume for one disposal pond at the operating depth of 2.9 feet is 9.43 acre-feet, which combined provides about 19 acre-feet of total storage. The facultative lagoons are typically operated in parallel, but the splitter box design enables them to be operated in series. There are no disinfection components present at the WWTF.

According to Table 2-1 of the RWD, which summarizes 2021 to 2023 self-monitoring report (SMR) data, influent flows to the WWTF average approximately 28,000 gpd, much less than the permitted flow of 57,200 gpd. The peak month daily average flow observed in 2021 was 62,000 gpd; however, outside of this extreme flow, the maximum month average daily observed flow during 2022 and 2023 was 38,000 gpd, and the annual average daily flow from 2021 through 2023 ranged from 25,000 gpd to 33,000 gpd

Monitoring and Reporting Program (MRP) Order No. 88-097 does not require the Discharger to conduct influent monitoring for typical domestic wastewater constituents of concern (e.g., biochemical oxygen demand, salinity, and nitrogen); however, weekly influent samples were collected between 29 February 2024 and 29 March 2024 to obtain influent wastewater quality data. These results are presented in **Table 1** below.

Table 1 - Influent Wastewater Quality

Constituent	Average Result
Biochemical Oxygen Demand (BOD) (mg/L)	260
Total Suspended Solids (mg/L)	204
EC (µmhos/cm)	718

Constituent	Average Result
Ammonia as Nitrogen (mg/L)	22
Nitrate as Nitrogen (mg/L)	ND
Nitrite as Nitrogen (mg/L)	ND
Total Kjeldahl Nitrogen (mg/L)	45
Total Nitrogen (mg/L)	45

MRP Order No. 88-097 requires effluent quality monitoring for EC and DO, and the existing WDRs require the DO level of any holding pond to be greater than 1.0 mg/L for 16 hours in any 24-hour period. Available data indicates the limit for DO limit was not violated.

Similar to the supplemental influent data collected, weekly effluent samples were collected for constituents of concern from 29 February 2024 through 29 March 2024, and average sample results are summarized in **Table 2** below. Observed effluent concentrations during February 2024 through March 2024 indicate compliance with the effluent limitations specified by WDRs Order 88-097.

Table 2 - Effluent Wastewater Quality

Constituent	Average Result
BOD (mg/L)	47
Total Suspended Solids (mg/L)	89
EC (µmhos/cm)	746
Ammonia as Nitrogen (mg/L)	2.4
Nitrate as Nitrogen (mg/L)	1.8
Nitrite as Nitrogen (mg/L)	ND
Total Kjeldahl Nitrogen (mg/L)	13
Total Nitrogen (mg/L)	14

The RWD states there is significant sludge build-up in the treatment ponds. The discharger plans to remove the sludge from each treatment pond; however, there is not a sludge removal process at the WWTF. One treatment pond will be taken out of service for a summer and the accumulated sludge will be removed after it has dried. Sludge would be removed from the second treatment pond using the same procedure during the following summer. The NOA requires the Discharger to submit a sludge management plan within 90 days of issuance.

POTENTIAL THREAT TO WATER QUALITY

According to data available via the State Water Resources Control Board’s Groundwater Ambient Monitoring and Assessment Program, the aerated facultative lagoons are located on the south side of the Facility and are more than 1,000 feet away from the nearest domestic well. This distance meets the setback requirements for impoundment (undisinfected secondary recycled water) from Table 3: Summary of Wastewater System Setbacks of the General Order. Depth to groundwater in the vicinity

of the treatment system is approximately 80-90 feet below ground surface (bgs). A discussion of soils underlying the WWTF in WDRs 88-097 indicates the presence of silty sand and sandy, and soil permeabilities are described as slow to moderate (10^{-4} to 10^{-6} cm/sec). Additionally, the facultative ponds are bentonite lined, mitigating the potential impact of raw wastewater impacting underlying groundwater.

NITROGEN EFFLUENT LIMIT EVALUATION

For enrollment under the General Order, the Discharger submitted a nitrogen limit evaluation since the flow limit is greater than 20,000 gpd. Attachment 1 of the General Order includes five site-specific considerations (Step A) that shall be considered when evaluating a discharge and the need for nitrogen effluent limits. These five site-specific considerations include: flow, groundwater depth, percolation rate, wastewater strength, and determination of the need for nitrogen removal. In addition, and as discussed further below, the Discharger submitted a 6 July 2021 Notice of Intent (NOI) for the Nitrate Control Program and is participating in the Kings Water Alliance. As part of the Kings Water Alliance, the Discharger is required to support the management group in providing drinking water to groundwater users impacted by discharges of nitrates and restoring the aquifer to nitrate levels at or below the nitrate water quality objectives.

Based on the proposed flow of 57,200 gpd, the depth to groundwater, slow to moderate percolation rates (10^{-4} to 10^{-6} cm/sec), the observed typical domestic wastewater strength, and compliance with the Nitrate Control Program, the discharge is not expected to significantly impact underlying groundwater with regards to nitrate. Therefore, nitrogen limits are not necessary at this time.

MONITORING REQUIREMENTS

Monitoring requirements included in the following sections from Attachment C of the General Order are appropriate for this discharge:

- Pond System Monitoring
- Solids Disposal

SALT AND NITRATE CONTROL PROGRAMS

The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 with [Resolution R5-2020-0057](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf). (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf).

Pursuant to the Basin Plan amendments, the Discharger was sent a Notice to Comply on 5 January 2021 (**CV SALTS ID: 1955**) with instructions and obligations for the Salt

Control Program within one year of the effective date of the amendments. On 24 August 2022, the Discharger submitted a NOI for the Salt Control Program and is participating in the Prioritization and Optimization Study (P&O Study).

For the Nitrate Control Program, the Facility and disposal area are within Groundwater Basin 5-22.08 (San Joaquin Valley - Kings), a Priority 1 basin/sub-basin. On 29 May 2020, the Discharger was sent a Notice to Comply for the Nitrate Control Program. On 6 July 2021, the Discharger submitted a NOI for the Nitrate Control Program and selected Pathway B (Management Zone Permitting Approach) and joined the Kings Water Alliance.

Under the Nitrate Control Program, dischargers that cause or contribute to nitrate pollution in groundwater must qualify for a limited term “exception” from meeting nitrate limits. Compliance time schedules must be as short as practicable and are not to exceed 35 years. The Central Valley Water Board will only grant exceptions upon finding that all elements of the Board’s Exceptions Policy are met. For nitrate, the Exceptions Policy dictates that exceptions will not be considered unless an adequate supply of clean, safe, reliable and affordable drinking water is available for those who have been adversely affected by the non-compliant discharge.

Management Zones in Priority 1 Basins were required to submit Management Zone Implementation Plans (MZIPs). The Kings Water Alliance submitted an MZIP on 5 September 2023. The MZIP was deemed complete by the Central Valley Water Board’s Executive Officer in November 2023. The MZIP contains a proposal for how dischargers within the Kings Water Alliance will meet the requirements of the Nitrate Control Plan and the Exceptions Policy.

To meet the requirements of the Nitrate Control Plan, the Kings Water Alliance MZIP includes sector-based Nitrate Reduction Programs, including one for Non-15 dischargers, including the Discharger. The MZIP proposes that the Discharger prepare and submit a facility-specific Nitrate Reduction Work Plan that would characterize the facility’s impact on groundwater, quantify the facility’s nitrate loading to the Upper Zone of groundwater, estimate the necessary improvements to the facility’s discharge to comply with Groundwater Protection Target(s) and/or other developed compliance metrics, and provide an implementation schedule that will ensure that the facility complies with the Nitrate Control Program.

[More information on the Salt and Nitrate Control Program](https://cvssalinity.or/public-info) may be found on the internet (<https://cvssalinity.or/public-info>).